

What is claimed is:

1 1. A method for use in a communications network having network
2 elements for performing telephony services, comprising:
3 providing an interface to the network elements;
4 receiving requests, by the interface, from a software module containing
5 elements representative of telephony services to be performed; and
6 sending, in response to requests of the module, commands to one or
7 more network elements involved in performing the desired telephony services.

1 2. The method of claim 1, wherein providing the interface comprises
2 providing representations of the network elements, the method further comprising
3 accessing the representations to generate the commands to the one or more network
4 elements.

1 3. The method of claim 1, wherein receiving requests from the software
2 module comprises receiving requests from script modules.

1 4. The method of claim 3, wherein providing the interface comprises
2 providing a script engine.

1 5. The method of claim 3, wherein providing the interface comprises
2 providing a script engine and an application programming interface.

1 6. The method of claim 1, wherein providing the interface comprises
2 providing a Simple Object Access Protocol component.

1 7. The method of claim 1, wherein providing the interface comprises
2 providing a Common Object Request Broker Architecture component.

1 8. The method of claim 1, further comprising representing the software
2 module as a state machine having a plurality of states each representing an action
3 corresponding to a telephony service.

1 9. The method of claim 1, further comprising the software module
2 receiving user input from which is generated the requests.

1 10. The method of claim 1, wherein sending the commands comprises
2 sending the commands to one or more network elements selected from the group
3 consisting of an integrated voice response system, a DTMF decoder, a voice mail
4 system, and a recording system.

1 11. An apparatus for providing telephony services in a communications
2 network having network elements comprising:
3 a software module containing instructions specifying performance of
4 telephony services in the communications network; and
5 an interface layer comprising one or more components responsive to
6 execution of the modules to provide commands to corresponding network elements to
7 perform the telephony services specified by the software module.

1 12. The apparatus of claim 11, wherein the interface layer comprises
2 representations of the network elements.

1 13. The apparatus of claim 11, wherein the interface layer comprises a
2 communications component to send the commands to the network elements.

1 14. The apparatus of claim 13, wherein the communications component
2 comprises an Object Request Broker.

1 15. The apparatus of claim 13, wherein the communications component
2 comprises an application programming interface.

1 16. The apparatus of claim 13, wherein the commands may include
2 Session Initiation Protocol messages.

1 17. The apparatus of claim 11, wherein the software module comprises a
2 script.

1 18. The apparatus of claim 17, wherein the interface layer comprises a
2 script engine.

1 19. The apparatus of claim 11, wherein the software module comprises a
2 Java object.

1 20. The apparatus of claim 11, wherein the interface layer comprises a
2 Simple Object Access Protocol component.

1 21. The apparatus of claim 11, wherein the interface layer comprises a
2 Common Object Request Broker Architecture component.

1 ~~22.~~ A system for use in a telephony network having network elements
2 capable of performing various telephony services, comprising:
3 means for storing representations of telephony services;
4 means for communicating with the network elements; and
5 means for executing the storing means to specify performance of a
6 telephony service, the communicating means providing, in response to execution of
7 the storing means, commands to the one or more network elements involved in
8 performing the desired telephony service.

1 23. The system of claim 22, wherein the communicating means sends the
2 commands over a packet-based network.

1 ~~24.~~ An article including one or more machine-readable storage media
2 containing instructions for providing telephony services in a communications
3 network, the instructions when executed causing a controller to:
4 receive requests from a telephony service software module specifying
5 plural telephony tasks; and
6 send commands to one or more network elements in the
7 communications network in response to the requests to perform the specified
8 telephony tasks.

1 25. The article of claim 24, wherein the instructions when executed cause
2 the controller to send commands according to a Command Object Request Broker
3 Architecture protocol.

1 26. The article of claim 24, wherein the instructions when executed cause
2 the controller to perform one or more of the tasks selected from the group consisting
3 of play recording, receive dual tone multi-frequency signals, receive voice data,
4 access voice mail, and forward a call.

1 ~~27.~~ A data signal embodied in a carrier wave comprising instructions that
2 when executed cause a system to:
3 receive requests specifying telephony services from a software module;
4 and
5 generate commands to network elements in response to the request to
6 perform the telephony services.